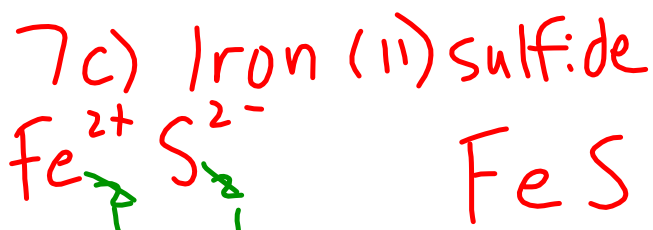
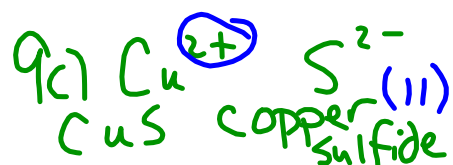


## Ionic Compounds with Polyatomic Ions

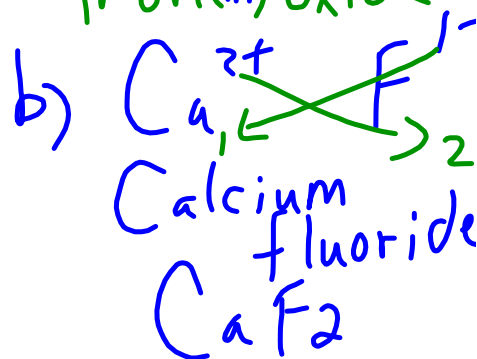
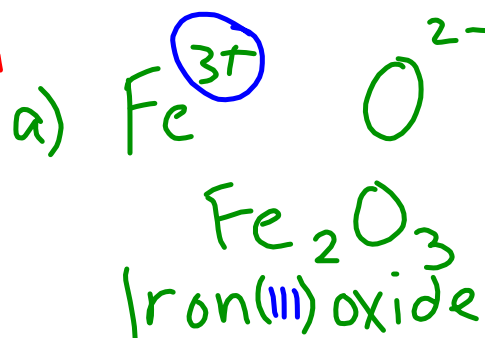
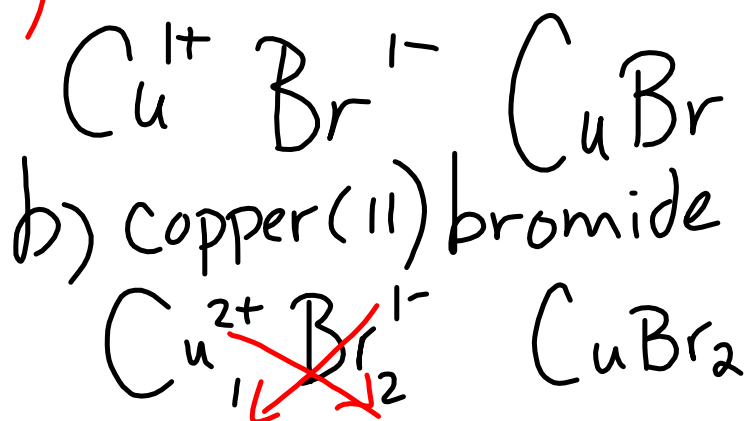
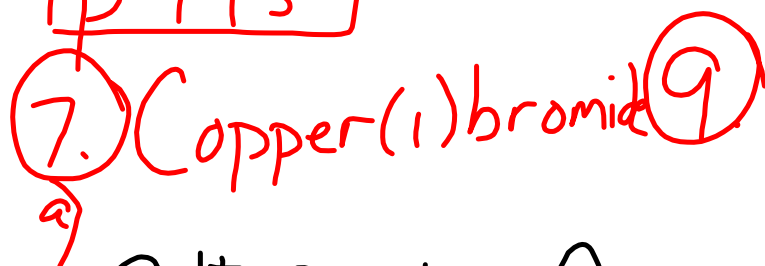
Polyatomic ions are groups of atoms that stay together as a unit and carry an overall charge.

Ex: Nitrate  $(\text{NO}_3)^{-1}$

## Homework from thursday



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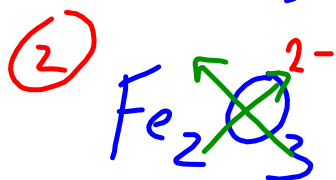
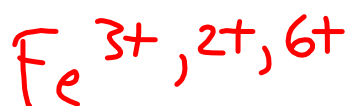
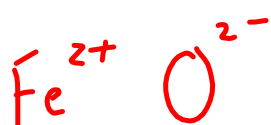


## Transition metals

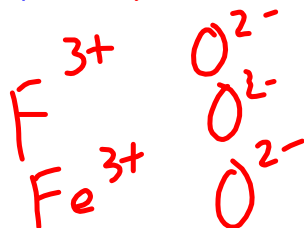
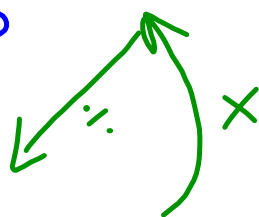
How do we find charge?



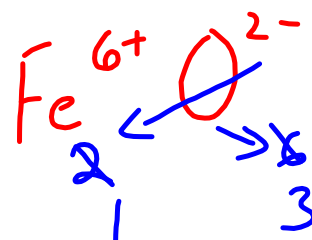
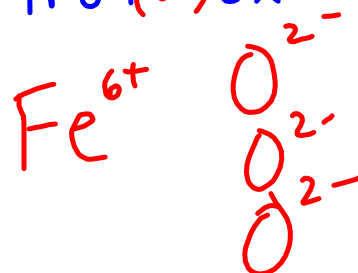
iron(II)oxide



iron(III)oxide

p195  
6,8

iron(VI)oxide



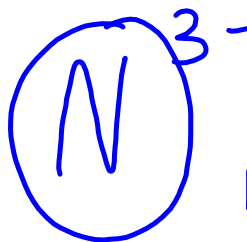
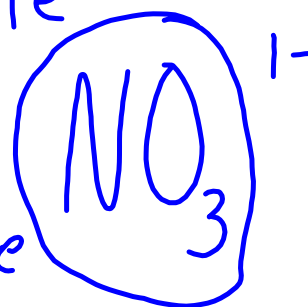
## Ionic Compounds with Polyatomic Ions

Polyatomic ions are groups of atoms that stay together as a unit and carry an overall charge.

Ex: Nitrate  $(\text{NO}_3)^{-1}$

$\text{NaNO}_3$  - sodium nitrate

nitrate



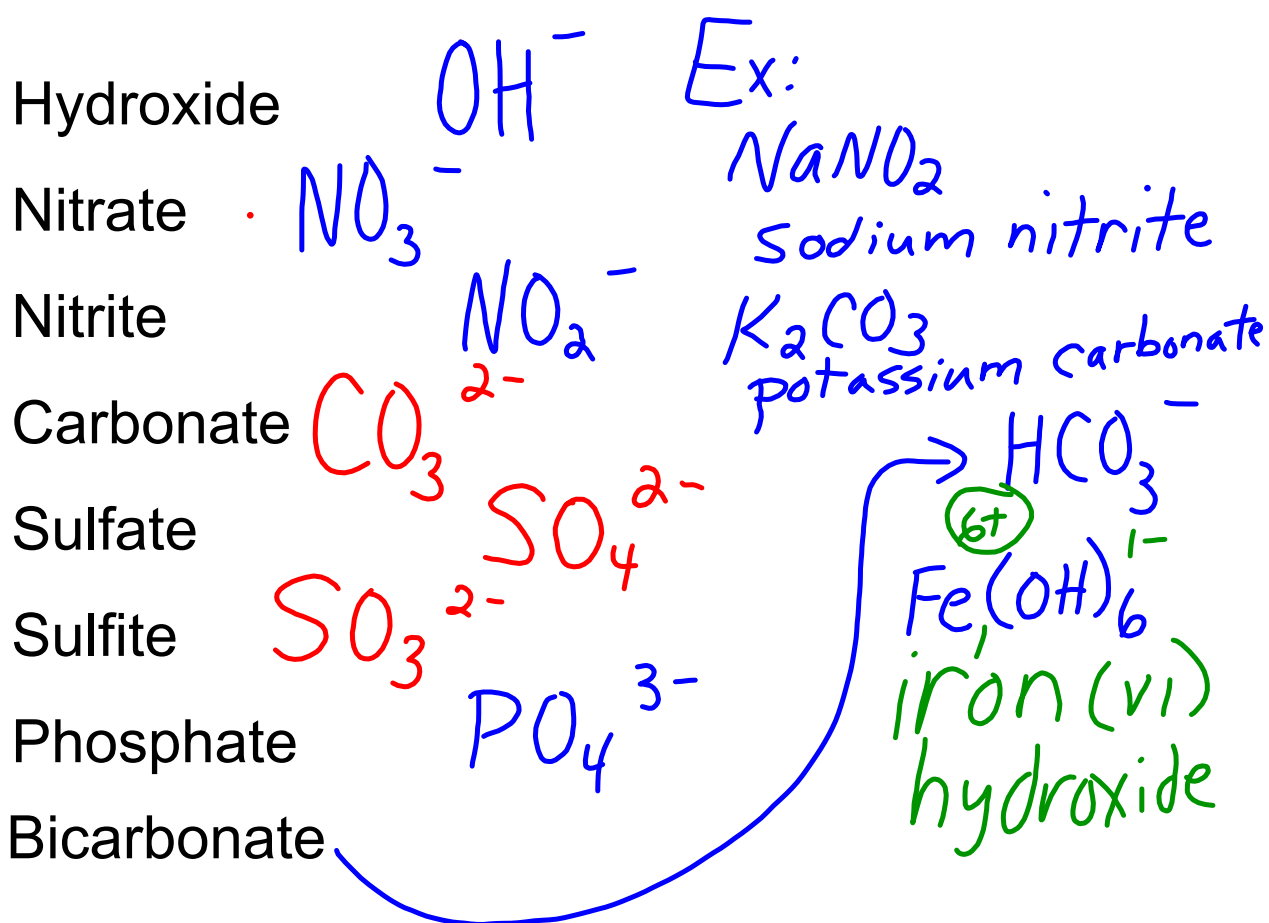
nitride

### Writing Chemical Formulas for Polyatomic Ions

- The symbol of the element or formula of the polyatomic ion with the positive charge goes first (as usual). The symbol of the element or the polyatomic ion with the negative charge goes last (as usual)

Example: Potassium and carbonate

$\text{K}^+$  and  $\text{CO}_3^{2-}$  becomes  $\text{K}_2\text{CO}_3$

POLYATOMIC IONS WE NEED TO KNOW

- If there is more than one polyatomic ion needed, we use brackets to keep all of the atoms together and put the subscript outside of the brackets.

Example:  $\text{Mg}^{2+}$  and  $\text{OH}^-$  becomes  $\text{Mg}(\text{OH})_2$